



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,767	04/23/2001	J. Graham Mobley	A-7195	4247
5642	7590	12/15/2005	EXAMINER	
SCIENTIFIC-ATLANTA, INC. INTELLECTUAL PROPERTY DEPARTMENT 5030 SUGARLOAF PARKWAY LAWRENCEVILLE, GA 30044			BROWN, RUEBEN M	
			ART UNIT	PAPER NUMBER
			2611	

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/840,767	MOBLEY ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Reuben M. Brown	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 05 August 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,3-6 and 8-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,3-6 and 8-13 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 6 & 8-9 & 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts, (U.S. pat # 6,418,558).

Considering amended claim 1, the claimed transmitter for transmitting reverse signals in a broadband communication system comprising:

'an input port for receiving analog RF signals from downstream', is met by the input ports 334, in the first transport embodiment (Fig 33). The transmitter reads on the MCC modem.

'converter for digitizing the analog RF signals', is met by the operation of the A/D converter 332 which receives RF modulated signals and converts them to digital, col. 49, lines 41-65.

'carrier-detect circuit coupled to the converter for detecting the presence of digital RF signals and allowing the digital signals to be provided to an output of the transmitter and transmitted upstream', is met by the carrier, amplitude, timing and recovery block 222, which sends signal's upstream, (Fig. 34 & col. 50, lines 49-65.

However, Roberts does not teach the additional claimed features of the 'delay circuit', 'switch coupled to the delay circuit' and 'controlled by the carrier detect'. Nevertheless, Dail, teaches the remaining subject matter', see Fig. 3 & 4; col. 8, lines 4-60. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Roberts the features of Dail, at least for the desirable benefit of reducing the signal noise ration as, as taught by Dail, col. 2, lines 34-50.

Regarding the additionally claimed feature of closing the switch enabling a path for transmission, and providing upstream signals only in the event of the presence of the detected RF signals, see col. 7, lines 39-65; col. 8, lines 42-60.

Considering claim 3, Roberts teaches a plurality of transmitters, a digital network coupled to the transmitters, a headend that receives the analog RF signals, (Fig. 1-5). The claimed ‘burst-mode’ feature is broad enough to read on the combiner 408, combining the upstream signals to be sent to the headend, Fig. 5.

Considering claim 6, the claimed elements of a communications system, corresponds subject matter mentioned above in the rejection of claim 1, and is likewise rejected.

Considering claim 8, see Roberts, Fig. 33.

Considering claims 9 & 12, Roberts teaches all subject matter, see Figs, 1-5.

4. Claims 4-5, 10-11 & 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts & Dail, In view of LaJoie, (U.S. Pat # 5,850,218).

Considering claims 4 & 10-11, Roberts is directed to a CATV system that transmits analog & digital signals, but does not disclose a digital and analog headend. Examiner points out that the claimed feature is broad enough to read on a single headend that receives both digital and analog signals. LaJoie provides a teaching of a headend that receives both analog and digital signals., (Col. 2, lines 58-67; col. 19, lines 41-67 & col. 11). It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Roberts with the

teachings of LaJoie, for the desirable advantage of providing a wider range of services to the consumer.

Considering claim 5, the signals in LaJoie necessarily include an addressing means in order to address the data to the proper recipient systems.

Considering claim 13, Roberts avoiding collision of reverse signals, by re-using frequency channels.

*Conclusion*

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A) Kaneko      Broadcasting system with upstream signaling.

Art Unit: 2611

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

**Any response to this action should be mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**or faxed to:**

(703) 872-9306, (for formal communications intended for entry)

**Or:**

(571) 273-7290 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reuben M. Brown M. Brown whose telephone number is (571) 272-7290. The examiner can normally be reached on M-F(8:30-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on (571) 272-7294. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9306 for regular communications and After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Reuben M. Brown



CHRISTOPHER GRANT  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600